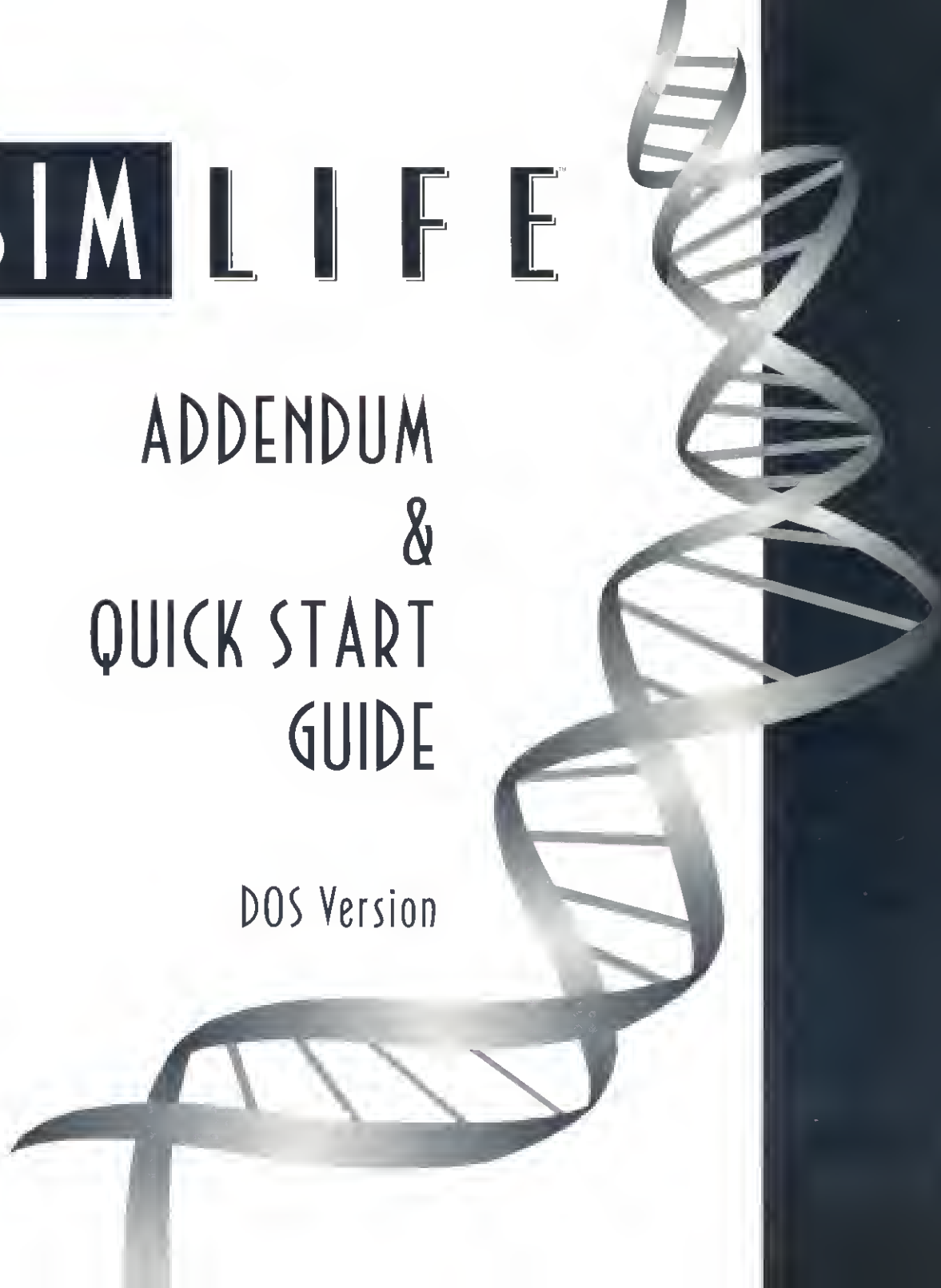


SIM LIFE™

ADDENDUM
&
QUICK START
GUIDE

DOS Version





SYSTEM INFORMATION

GENERAL INFORMATION

SCREEN GRAPHICS

NO COPY PROTECTION

MEMORY AND THE DOS EXTENDER

HARDWARE REQUIRED

IBM or 100% compatible computer, 386 or above

2MB RAM required, 4 MB recommended

5 1/4" 1.2MB (high density) or 3 1/2" floppy disk required

Hard disk required, with at least 2.5MB free space

Microsoft-compatible mouse required

VGA with color or grey-scale monitor required

Optional sound boards: Adlib or compatible, Soundblaster or compatible, Roland

SOFTWARE REQUIRED

MS- or PC-DOS 3.0 or above

This Addendum/Quick Start Guide contains all the DOS-specific information needed to start and play SimLife on an IBM-compatible computer.

SimLife for DOS-based computers supports VGA graphics in 16 colors at 640 x 480 resolution. On *some* Super VGA cards, SimLife will run in 16 colors at 800 x 600 resolution. If you have a Super VGA card that SimLife supports, it automatically installs itself to run at 800 x 600. If you prefer 640 x 480, you can choose it during installation.

SimLife is not copy protected. This is an ongoing experiment and a big leap of faith for us. We are trusting you not to give away copies of this game. Copy protection is a pain—for all of us—and we'd like to stop using it forever, but if SimLife falls victim to piracy, then we will revert to using protection on future products.

SimLife takes a *lot* of memory—at least 2MB total, and at least 1750KB free (combination of base memory and extended memory). It will use more if you have it. In a large world with lots of plants and animals it can use as much as 16MB. In order for SimLife to even run on a DOS machine we had to include a DOS Extender by FlashTek as part of the program.

SIMLIFE

QUICK-START GUIDE

INSTALLING SIMLIFE

STARTING SIMLIFE

THE ON-SCREEN TUTORIAL

Before playing or even installing SimLife, we recommend that you make and use backup disk copies, and keep the original disks in a safe place.

SimLife must be installed to a hard disk before use. Here's how:

1. Choose either the 5 1/4" or 3 1/2" floppy disks, depending on your computer, and put SimLife Disk 1 into your A: or B: floppy drive.
2. Type **A:** [Enter] or **B:** [Enter], depending on your drive.
3. Type **INSTALL** [Enter]. If you have trouble running the install program, try it again, but type **INSTALL /D** [Enter].
4. Before installation actually begins, you will be shown the Readme file. This file contains all the last-minute information about SimLife that was too recent to make it into the manual or this addendum. When you are done reading, hit the Escape key to continue with the installation process. (You can always go back and read this file later with any text-viewer or word processor or run Install again.)
5. Follow the instructions on the screen. You will be asked some questions. If you aren't sure about the answer to any question, just accept the default answer—it should work. At one point you will be asked to remove Disk 1 and insert Disk 2.
6. After the installation is done remove Disk 2 from your drive.

After installation (see above), make sure you are in the SimLife directory, and type **SIMLIFE** [Enter].

After starting SimLife, you will see the New Game Window. Click on the Tutorial button, then on Play Scenario to start the on-screen Tutorial. You will then be walked through the basics of SimLife. A special Tutorial Menu will appear to help you navigate and access special Help screens.

You can start the on-screen Tutorial at any time by selecting New from the File Menu, clicking on Tutorial in the New Game Window, then clicking Play Scenario.

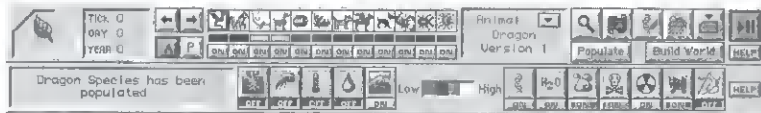
There are two additional tutorials in the manual that will take you on a more complete tour of SimLife and demonstrate how to design, set up and carry out a SimLife experiment.



DOS VERSION FEATURES

There are a couple of small differences between the screenshots in the manual and the screen in the DOS version of SimLife. Everything is there and everything works the same, but a few things have been moved around on the screen.

The SimLife Dashboard in the DOS version appears at the top of the screen, and cannot be turned off. The Edit Window Control Panel and Map Window Control Panel have been moved from their respective windows to reside right below the Dashboard. Only one control panel will be visible at a time, depending on whether the Edit or Map Window is active.



Dashboard with
Map Window Control Panel



Dashboard with
Edit Window Control Panel

The Biology Lab has been changed a little—but only at Select Level. Instead of showing plants and animals at once, it separates them and gives you a button for switching between the two.

BIOLOGY LAB AT SELECT LEVEL



SimLife for DOS-based computers has no built-in facility for taking screenshots or printing screens. Some third-party screen grabbers will work with SimLife, but most only work in 640 x 480 resolution.

TAKING SCREENSHOTS

SIM LIFE

MOUSE AND KEYBOARD

A mouse is required to play SimLife. It is *possible* to play SimLife without a mouse, but not worth the effort. Use a mouse. You'll be glad you did. There are keyboard controls and shortcuts for many of the functions and settings in SimLife, and you'll find that a combination of the mouse and keyboard is the fastest way to play. A Keyboard Chart of all key commands and shortcuts is found on the back page of this addendum.

MOUSE BUTTONS

When the manual or addendum refers to "clicking" the mouse, use the left mouse button.

CLICKING, DOUBLE-CLICKING, AND DRAGGING

To activate or select an object, menu, icon, or button, move the cursor to it and "click." Clicking with a mouse is pressing and releasing the left mouse button. Clicking with the keyboard is pressing and releasing the Space Bar or the Insert key.

To activate some functions you will need to "double-click," which is just clicking quickly twice in a row.

There are also times when you need to move or "drag" something across the screen. To do this, point to the thing you want to drag, and press *and hold* the mouse button, Space Bar or Insert key. While still holding the button or key down, move the object with the mouse or cursor keys to the new location, then release the mouse button or key.

USING MENUS

Menus are used extensively in controlling SimLife, and are located at the top of the screen in the "Menu Bar." Only the names of the menus show until you open them. To open a menu, move the cursor to it and click. To select a menu item, click on it. To close a menu without choosing an item, either click somewhere on the screen, but off the menu, or press the Escape key. Once a menu is open, you can use the right- and left-arrow keys to cycle through and open the other menus.

There are keyboard shortcuts for opening menus: hold down the Alt key and press the first letter of a menu name to open it. (This doesn't work with the Speed menu since Alt-S opens the Simulation Menu. Sorry.)



Once a menu is displayed, you can use the up and down arrow keys to highlight the item you want, then click (mouse button, Space Bar or Insert key) to activate it. You can also highlight an item in an open menu by typing the first letter of the item. If there is more than one item in that menu beginning with the same letter, then repeatedly hitting the letter key will cycle the highlight through all the items beginning with that letter.

Many of the menu items can be activated with keyboard shortcuts without even opening the menus. See the Keyboard Chart on the back page of this addendum.

All the action in SimLife happens in windows. You can have multiple windows open on the screen at once. Windows can overlap and cover each other. The window in "front" is the active window. If you click on any part of a window, it will be brought to the front and made active. For ease of use, leave a part of each open window showing so you can quickly activate it by clicking on the part that shows.

OPENING WINDOWS

Windows can be opened by selecting them in the Windows Menu. If a window is already open (on the screen) but not active, selecting it in the Windows Menu will bring it to the front and activate it. Some windows can also be opened and activated by using the buttons on the Dashboard and the shortcuts in the Keyboard Chart on the back of this addendum.

CLOSING WINDOWS

Windows can be closed by clicking in the Close Box in the upper-left corner of the window. You can also close the active window with the keyboard command Control- - (minus on the number pad).

HIDING WINDOWS

Windows can be hidden (moved into the background without closing them) by activating another window, or by clicking on the Hide Box. You can also hide a window with the keyboard command Control+ (plus on the keypad).

WINDOWS





MOVING WINDOWS

Most windows can be moved by clicking and dragging their Title Bar with the mouse. You can also move windows from the keyboard by hitting Control-P (for Position), then using the cursor keys to move the window. Hit Space or Insert when the window is where you want it.

RESIZING THE EDIT WINDOW

The Edit Window can be resized and reshaped by dragging the Resize Box in the lower-right corner of the window. You can resize the Edit Window with the keyboard by hitting Control-R, then using the cursor keys to move the Resize Box. Hit Space or Insert when the Edit Window is the shape and size you want.

The Edit Window also has a Zoom Box in the upper-right corner. If you click on this, the window will grow to fill the whole screen. Click on it again and the window will return to its former size and shape. Control-Z activates the Zoom Box from the keyboard.

SCROLLING THE EDIT WINDOW

The entire world cannot be displayed in the Edit Window at once. You must scroll the terrain in the Edit Window to see everything.

One way to scroll is to hold down the Control key while using the arrow keys: the cursor will stay where it is, and the terrain will scroll.

The simplest way to scroll is to move the cursor to any edge or corner of the screen with a mouse or with the arrow keys. These keys let you quickly move the cursor:

- HOME moves the cursor to the left edge of the screen.

- END moves the cursor to the right edge of the screen.

- PgUp moves the cursor to the top edge of the screen.

- PgDn moves the cursor to the bottom edge of the screen.

- 5 (on the numeric keypad only) moves the cursor to the center of the screen.

If the Scroll Lock key is on, the Edit Window will not scroll when you move the cursor to the edge of the screen.



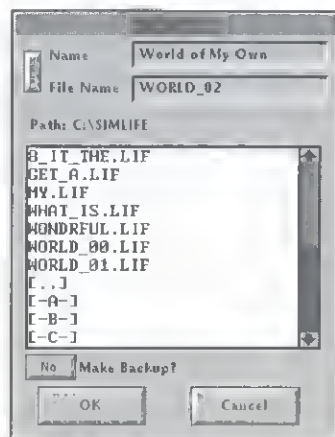
SAVING AND LOADING GAMES

SAVING GAMES

To save a game, select **Save** from the **File Menu**. If it has already been saved before, it will be re-saved under the same name in the same place. If it has not been saved before, you will be presented with the Save Game dialog box, where you name the game and tell the computer where to save it. If you have already saved your game, but want to save it to a new disk or directory, or you want to change its name, select **Save As** from the **File Menu**. To save a new game:

1. Give the game a long, descriptive name (spaces are OK).
2. Give the game a file name. (It must conform to the rules of DOS.) The extension **.LIF** will be added to the file name by the computer.
3. Select a destination drive for the file by double-clicking on a disk name. Double-click on **[..]** to move up to a parent directory, and double-click on subdirectory names to move down into them.
4. Click **OK** or hit **Enter**. (Click **Cancel** or hit **Escape** to cancel.)

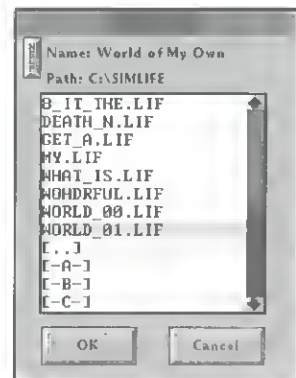
The Tab key switches you between the two names and the list box. When you choose **Save As**, SimLife will pick a default file name for your game, consisting of the first six letters of the long name and a two-digit number. This way you can quickly save your world at different times and different stages of development. If you set **Make Backup?** to **Yes**, then the next time you save the game (not **Save As**) SimLife will rename your last saved version of the game to have a **.BAK** extension before saving the new one. If you change your mind about loading a game, click on the **Cancel** button. On-screen Help is available—just click on the Help button.



LOADING GAMES

To load a game, first select **Load** from the **File Menu**. When the Load Game dialog box appears, double-click on a game's name in the list box, or single-click on it, then click **OK** to load it. Click **Cancel** or hit **Escape** to cancel file loading and close the Load Game dialog box.

The current path is displayed near the top of the dialog box. Click on a file name in the list box to see the full game name above the path. If there are more games than can fit in the list box, use the scroll bar and arrows to search through them. Double-click on **[..]** to see what's in the parent directory (if any). Double-click on other drives or subdirectories (if any) to see their contents. On-screen Help is available—just click Help.



SIMLIFE

FILES, EXTENSIONS AND DIRECTORIES

SimLife directory structure

SIMLIFE

GAMES

ORGOTS

ANIMALS

FANCIFUL

FILTER

HERBIVOR

PREDATOR

PREHIST

PLANTS

DESERT

TEMPERAT

TROPIC

WATER

ZOOS

Besides game files, there are a number of different types of files that can be loaded into and saved from SimLife. These files hold information for a group of plants (Herbarium), a single plant, a group of animals (Zoo), and a single animal. These extensions are used to mark each type of file:

.PNT Single Plant

.ANL Single Animal

.ZAN Zoo (multi-animal set)

.ZPL Herbarium (multi-plant set)

.DTL Data Logging File (standard text file)

When SimLife installs itself onto your disk, it installs the following subdirectories (unless you change their names):

SIMLIFE contains all the SimLife files, plus the following directories:

GAMES contains the saved games described below.

ORGOTS contains a number of SimLife life-forms, divided into the following directories:

ANIMALS contains directories of different types of animals.

PLANTS contains directories of different types of plants.

ZOOS contains the multiple plant and animal sets.

SOUNDS

The sounds in SimLife will vary in both amount and quality depending on your computer, and on what type of sound board you have (if any). Most sounds in SimLife happen in response to your actions, but there are three sounds that occur to notify you of important events that you might not otherwise notice.

Ooooh—this moan is the sound of an animal dying.

Ooh-la-la—this is the sound of animals mating.

Fanfare—this sound announces a birth.

These sounds will not be heard if your computer or sound card does not support the playing of digitized sounds. Digitized sounds are disabled on slower 386s even if they have sound cards.

BEYOND THE VALLEY OF THE SIMS

SimLife is a powerful simulation engine that can be put to use in a number of different ways, both useful and silly. We've included a few saved games on one of the disks that show some of these uses (or abuses). Try them out. See if you can figure out what they are and why. The file GAMES.TXT, which can be found in the SIMLIFE\GAMES directory, briefly describes each saved game.

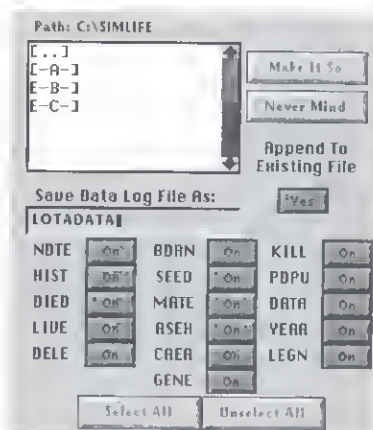


DATA LOGGING

An advanced—but very useful—feature in SimLife is Data Logging. When you activate the Data Logging... item in the Technical Submenu of the Simulation Menu, the program will write a lot of data to disk in a standard text file. This information can then be loaded into a spreadsheet or other statistical analysis program, and you can make all the graphs and charts you could ever want.

Warning: The Data Log file can get huge. Depending on the size of the world and the number of plants and animals in it, this file can take up to 100KB per game year. Make sure you have the disk space.

When you activate Data Logging, you will be presented with a dialog box that lets you name the data file and tell the computer where to save it. The extension **.ddl** will automatically be added to the end of the file name. You may have to rename the file to have a **.txt** extension before you can import it into another program.



DATA LOGGING FILE-SAVING OPTIONS

In addition to the usual file-saving controls, you can set a few other options.

APPEND TO EXISTING FILE

Sometimes you might run SimLife with Data Logging, take a break (to work—or better yet, play SimCity®), then come back to SimLife later. If you want to continue Data Logging where you left off, and have the data go into the same data file you were using before, use the same file name and check this box.

DATA BUTTONS (A.K.A. *FLAGS*)

You can choose what data to save to disk by setting the various data buttons to Yes or No. If you hold down the Control key while setting one button, all the buttons will be set the same.

An explanation of what information each button represents can be found starting on the next page, as part of the complete description of the Data Logging file format.

SIMLIFE

DATA LOGGING FILE FORMAT

In order to make use of this data once you get it into a spreadsheet (or other program), you'll need to know how all the data is arranged.

Each line in the data log file starts with the four-letter abbreviation, as seen next to each checkbox, that identifies the type of information the line contains, followed by one or more data fields. Fields are separated from each other by a single Tab. Lines are separated by a Return. The first data field is the simulation time, showing the year, day, and tick of the event being reported. On most lines, the next field is either a species or an Orgot (an individual SimLife Organism) identifier code, which consists of a flag indicating whether this is a plant or an animal species, the species number and version, and the specific organism if applicable. The remaining fields are different for each message type as noted.

Type	Year.Day.Tic	Date	Time	Message
NOTE	0000.000.000	92/06/01	17:12:51	"Log started."

These are human-readable messages that report when the data log was started or closed, as well as when a game is paused, the simulation time is reset to zero, or a game is loaded.

Type	Year.Day.Tic	SpeciesID	Event	Message
HIST	0000.000.000	1.19.01.000	2	"'Wheatgrass' has only seeds left."

All messages that appear in the History window will be recorded to the data log as they occur.

Type	Year.Day.Tic	SpeciesID	Remaining Species Population
DIED	0000.000.000	1.02.01.023	12

This is a record of each plant or animal death.

Type	Year.Day.Tic	SpeciesID	New Species Population
LIVE	0000.000.000	1.00.01.030	30

Each time a new plant or animal is created or populated, the species identifier and unique orgot number of the new inhabitant is recorded. If the GENE checkbox is checked, the genetic makeup of the new organism is reported.

Type	Year.Day.Tic	SpeciesID	New Species Population
BORN	0000.000.000	1.00.01.030	30

Each time an animal is born, the birth is reported. If the GENE checkbox is checked, the genetic makeup of the newborn is reported.



Type	Year.Day.Tic	SpeciesID	New Species Population
SEED	0000.000.000	1.00.01.030	30

Each time a plant sprouts from a seed, the event is reported. If the GENE checkbox is checked, the genetic makeup of the new plant is reported.

Type	Year.Day.Tic	OrgotID	OrgotID
MATE	0000.000.001	0.06.01.002	0.06.01.001

Each time a pair of animals or plants mate, the event is reported. The first OrgotID is the female.

Type	Year.Day.Tic	OrgotID	OrgotID
ASEX	0000.001.000	0.12.01.005	0.12.01.005

Each time an asexual plant or animal becomes pregnant, the event is reported. Since the orgot is mating with itself, the OrgotID is duplicated for consistency with the MATE data format.

Type	Year.Day.Tic	SpeciesID	Number Killed
KILL	0000.000.000	1.00.01.000	30

Each time a plant or animal is manually killed, the death is reported.

Type	Year.Day.Tic	SpeciesID	Number Populated
POPU	0000.000.000	1.00.01.000	30

Each time a species is manually populated, the event is reported.

Type	Year.Day.Tic	SpeciesID	Daily Statistics
DATA	0000.001.000	0.00.01.000	See below

At the end of each simulation day, the census statistics for each active species are summarized.

Type	Year.Day.Tic	SpeciesID	Annual Statistics
YEAR	0001.000.000	0.00.01.000	See below

At the end of each simulation year, the census statistics for each active species are summarized.

Type	Year.Day.Tic	SpeciesID	Message
DELE	0000.000.000	1.00.01.030	'SpeciesName' has been deleted.

Each time a species is deleted, the event is reported.

Type	Year.Day.Tic	SpeciesID	Message
CREA	0000.000.000	1.00.01.030	'SpeciesName' has been created.

Each time a new species is created, the event is reported.

SIM LIFE

Type	SpeciesID	SpeciesName
LEGN	0.00.01.000	"Elephant"

At the beginning of each data log is a legend or listing of each species identifier and species name. This can be used as a key to look up the name of a species from its identifier number.

Type	Year.Day.Tic	OrgotID	MothersID	Genetic Data
GENE	0000.000.000	1.00.01.001	1.00.01.000	See below.

Each time a plant or animal is populated or born, the genetic information for that individual is reported. Since animals have more genetic data than plants, animals have several additional fields in addition to the basic fields.

DATA and YEAR Fields

All of the following fields are recorded for DATA (daily census statistics) and YEAR (yearly census summaries) for each active species:

Simulation time; SpeciesID; Total species population, including seeds for plants; For plant species, the number of seeds, if any; Species population, not including unsprouted seeds; Number of births or sprouts in this species; Number of deaths in this species; Amount of radiation accumulated in this species population; Food level for this species; Water level for this species; Health level for this species; Number of females in the species population; Average age of the species population; Average size of the species population; Total biomass of this species.

GENE Fields for Plants

These are the fields recorded for each individual plant:

Simulation time; OrgotID; OrgotID of this orgot's mother; Food Store gene; Water Store gene; Health Store gene; Height gene; Mutation gene; Life span gene; Stealth gene; Birth/Death gene; Movement/Food Source gene; Reserved gene (not used for genetics).

GENE Fields for Animals

These are the fields recorded for each individual animal. They are the same as the plant genes above, plus the following additional fields:

Behavior gene; Vision gene; Food Action gene; Water Action gene; Health Action gene; Food Danger gene; Water Danger gene; Health Danger gene; Gestation Time gene; Gestation Size gene; Metabolism/Gender/Share Food gene; Adult Age gene; Weapons gene; Turn Style gene; Persistence gene; Species0 attract/repel gene; Species1 attract/repel gene; Species2 attract/repel gene; Species3 attract/repel gene; Species4 attract/repel gene; Species5 attract/repel gene; Species6 attract/repel gene; Species7 attract/repel gene.

KEYBOARD CHART

FILE COMMANDS

Control-N	New Game
Control-L	Load Game
Control-S	Save
Control-A	Save As
Control-Q	Quit

SPEED COMMANDS

Shift-0	Pause
Shift-1	Slow
Shift-2	Medium
Shift-3	Fast
Shift-4	Ultra

OTHER KEYS

Tab	Toggles between Plant and Animal in Dashboard. Switches between text fields in Save Game dialog.
Escape	Cancels operations, deselects selections.
Shift-Escape	Unhighlights highlighted organism.
Cursor keys	Move cursor.
Control-Cursor	Scrolls terrain in Edit Window.
Control key	In Edit Window: Hold down while cloning to cause mutation. Hold down while using The Carrot to call only Highlighted animal. Hold down while raising or lowering Temperature or Moisture to limit effect to one tile.
Control key	In the Dashboard: Hold down while clicking an On/Off button to turn all plants or animals on or off. Hold down while selecting a color to set all plants or animals to that color. Hold down while clicking on the Pause button to single-step the simulation one Tick. Hold down while clicking the Populate... button to randomly populate the world.
Control key	In the Graphs Window: Hold down while selecting the Local Species or Information to set all four Selectors at once.
Control key	In the Food Web Window (Main Links display): Hold down while clicking on a predator to open the Population Interaction Window.
Control key	In Data Logging Dialog Box: Hold down while turning any button on or off to turn them all on or off.
Alt key	Hold down while building new world to skip display of layer-building. Hold down while clicking Play Scenario in New Game Window to skip the Build World Window and quickly build default world without displaying steps.

WINDOW COMMANDS

Control +	Hide (keypad plus)
Control -	Close (keypad minus)
Control-P	Position (move)
Control-R	Resize
Control-Z	Zoom

ICON COMMANDS

Control-C	Copy (icons)
Control-V	Paste (icons)

ON/OFF TOGGLES

Control-J	Music
Control-K	Sound
Control-U	Update All Windows

OPENING MENUS

Alt-F	File
Alt-E	Edit
Alt-S	Simulation
Alt-W	Windows
Alt-D	Disasters

OPENING WINDOWS

Control-E	Edit
Control-M	Map
Control-T	Climate Lab
Control-B	Biology Lab
Control-I	Variables
Control-2	Phenotype
Control-3	Evaluation
Control-4	Diversity
Control-5	Food Web
Control-6	Gene Pool
Control-7	Graphs
Control-H	History
Control-8	Mortality
Control-9	Population
Control-Y	Laws of Physics
Control-I	Locate Individual
Control-D	Data Logging